Gannate Khowailed:
... for joining the call. It's an exciting time, and I'm excited to introduce this webinar. Ideally, what we are here today is to talk about the Home Energy Score program that was developed at the U.S. Department of Energy and how this program is trying to enable the ability to continue realizing energy savings while doing it cost-effectively. The unique thing about this program is that it can enable happier homeowner, happier customer, and more engaged customer. For this specific webinar, we want to touch on it from a utility perspective. And for that, besides the program manager, Joan Glickman, we are also hosting two special guests from United Illuminating and New Jersey Natural Gas to talk about their experience with implementing the program.

First presentation slide:
Without delaying it any further, I'd like to introduce Joan Glickman, who manages the U.S. Department of Energy Home Energy Score and home energy information. Joan, if you have heard her speaking at any other point, she would tell you that she has worked on the Home Energy Score program longer than any other project. So that just shows how much she's involved in that program. Joan, are you on the line?

Joan Glickman:
Yes, I am. Happy to be here.

Gannate Khowailed:
Awesome. Thank-you for joining, Joan. And I'm wondering if you could just give us a bit of an overview, for those who are not very familiar with Home Energy Score, on what it is, and what is the value that it brings to utilities and their homeowners?

Joan Glickman:
Of course. I'd be happy to. And thank you all for joining us today. And apologies to those of you who already know something about the Home Energy Score, but I will try to make the background part pretty brief. So I think you can see on the next slide, basically the Home Energy Score is really intended to be kind of a simplified version of a miles-per-gallon for homes.

Next slide:
Existing homes, primarily. And we decided to create this standardized score about six years ago, in 2010, and we did a lot of testing with a lot of great partners and pilots in the field. And have, I think, created a really great product here because of those partners who helped us revise it and improve it and make it as useful as possible. So the real value, I think, to folks like you -- as Gannate said, we wanted to do something specifically for utilities -- is that obviously program providers want to have something that's reliable, when they're talking to their homeowners and their customers. And we believe, given the testing we've done on the Home Energy Score, even though it is a pretty simplified modeling tool, because it only relies on about 40 inputs, it does provide consistent, reliable results. We also think that a lot of our partners appreciate the fact that it's available at no cost. And there is some ability to customize the report that you provide to your customers. And as Gannate already said, we think it demonstrates an improvement in customer satisfaction, as well, given what we've heard and what we've actually studied with a bunch of our different partners. And we have been pretty committed to doing research along the way to make sure that we continuously improve the program. And you are all obviously interested in your own work and obviously that is most important in terms of how your homeowners consider your efforts. And obviously reliability, I'm sure, is first and foremost, but it's also helpful to engage your homeowners in

a way that they can understand what's going on with their energy bills and their energy usage. So we think the Home Energy Score provides an easy way to engage your customers, because it's pretty simple to understand a 10-point scale, as well as the other information that's provided. And it also, we hope, helps to engage them in a way that they might be motivated to make efficiency improvements, which is really the ultimate goal of having any of these scoring systems, is to get people to care more about efficiency, and reducing their energy usage. So the Home Energy Score really helps to expose and document the investments that a homeowner is making so that they can not only take credit and enjoy it while they're living there, but they can also take credit for that when they're ready to sell the house. So as I'm sure you know, customers don't necessarily think a lot about insulation or air sealing or what the SEER value is of their air conditioner, or the efficiency of their furnace, boiler, etcetera. And if you're buying a house and you see a lot of numbers related to that -- SEER 13 and different efficiency numbers -- it's kind of meaningless to most purchasers. But the Score helps you pull it all together by being something that realistically shows how efficient the home is and how much energy it will use. So the next slide.

Next slide:

So what the Score really is, as I said, it's a standardized way to understand and model how much energy the home is likely to use under standard operating conditions. So unlike a utility bill, which reflects the current homeowner's behavior -- so if they're a family of 10 versus a single person, obviously their usage is going to be very different -- what the Home Energy Scoring tool does is apply standard operating assumptions about thermostat settings, about number of showers, etcetera, (inaudible) as well as the local climate and weather patterns, generates a number that relates to how much energy that home is likely to use for heating, cooling, and hot water. And then it converts that into a score. So if you are a 2, in this case, you're obviously using quite a bit of energy, but it shows that there is potential to get to a 6 cost-effectively, and what the savings would be associated with the improvements that would get you to a 6. It takes about an hour or less to complete. You have to collect about 40 data points, which many of you are probably already familiar with, but if you're not, we can certainly make those available to you. And many times, if you're going into a house anyway to do some kind of quick energy checkup or other -- or even as you're contacting your customers, you might already be collecting at least some of that information. So there's generally a good amount of overlap so it can actually, in terms of additional time, it could be much less than an extra hour for the work you're doing. There are a wide range of folks that can do the Score, although they do have to be qualified and have to pass a test. And there's no requirements in terms of reporting; it's all automated, and we make the data available to the assessors who are scoring the home, but also to the partners, like a utility, if they have assessors working for them, they can get all the data that's been entered and as well as the calculations that have been generated by the tool. OK, next slide.

Next slide:

So the Score, if you're using our standardized Score report, it would have that first page that would tell you how the home is scoring today and how it could score in the future with improvements. But it also, as I said, it calculates how much energy that house is likely to use under standard operating conditions. And it breaks it down into whatever types of fuels are being used in the house, electricity, gas, oil, etcetera. And it also will provide you a total energy usage, if you want to convert that into a dollar amount, even though the base load portion of a home's energy usage is not considered in the Score itself. This part of

the report also documents all the inputs that the assessor put in, just as a point of reference in case anyone questions how it was scored, etcetera. Next slide.

Next slide:

The Score also generates some recommendations that have been targeted and tailored specifically to that house. So the way it works is, the scoring tool runs the home given its current characteristics, and then it will run it with a bunch of different improvements that are related to the assets. So different levels of insulation in the walls, in the attic, different types of equipment, etcetera. And with the ones that come off as being cost-effective, it will list those. So it'll show you things that you can do now, like insulation and air sealing, and things you can do later, (inaudible). Partners, and many of ours already do, can choose not to show these recommendations as long as they are customizing and using their own recommendations. So we do require that you give your customers something to go on, in terms of next steps, but if you don't want to use ours, you're welcome to use your own. And then the upgrade score that you see on the first page would reflect the ones that you are providing to them. Next slide.

Next slide:

So I think that's actually it, in terms of the first part of our presentation.

Gannate Khowailed:

Thank-you, Joan. And usually at that point of the discussion is when you have a lot of questions coming up and people are wondering, but what does it take to implement the program? And a lot of residential energy efficiency programs are not in a position where they want to add additional costs. So I want to hear from you in terms of like how the program actually gets implemented, and what does DOE do in terms of trying to reduce additional cost for the Home Energy Score program.

Joan Glickman:

Next slide:

Sure, and we do do a lot to listen to our partners and make sure that it's as flexible as well as cost-effective as possible for all of you, because we know you obviously need to keep your costs down. The way it works is we partner with utilities, states, contractors, etcetera, and then those partners are kind of in charge of assessors. The assessors don't need to be direct employees of those partners. They can be subcontractors or they can have a loose affiliation. As long as the partner says, OK, these are the 10 people that we want to be assessors for us, we associate those people with that partner. Those assessors have to pass an online free exam and a training that we offer. And then once they do that, they're ready to go and they can start scoring homes. And as you'll hear from some of our partners today, and I think there's probably (inaudible). So if you want to tie it into your Home Performance with ENERGY STAR® program, if you have that, that's a great way to do it. Some of our partners do like a before and after score, so to show the homeowner, here your home is a 3, you've made improvements, good job, pat you on the back, and now you're a 7. At least one of our partners has done it along with a direct install program, where they're going into the houses anyway, so this is an add-on. In that case, it does add a little more additional time, because in most cases with direct install, you're not already collecting a lot of data. You'll hear from Jerry about how they've integrated into their rebate programs. And then we have some utilities, although this is not usually their main focus, who are also interested in the real estate transaction, and more so in terms of making sure that the information about the homes they scored can make it into that transaction at a later date. So outside of utilities, we're working with home inspectors to score homes that have not yet been scored. Next slide.

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In terms of minimizing cost, as I said, we obviously know that this is important. It's kind of a plug-in service. You can use our scoring tool directly online, but if you don't want to do that, and you're using your own type of auditing tool or other type of data collection tool, you can use what's called an API, and that requires that your software developer does a little bit of programming on their end to be able to send the data to us kind of on the back end through a web service. That's free, although it obviously does take some time and effort on your part to do the programming. We've tried to make the training and testing as seamless and easy to use as possible, and we continue to make improvements there. In addition to being free, it's at your own pace. Each of your assessors can do it on their own time. And typically, they'll do it over a few days and then take the test again at their own pace. And as I said, I think our partners would agree that we're very committed to continuous improvements and hearing what our partners have to say about what works and what doesn't work. One area that we know we need to further reduce costs is in the area of quality assurance. At least with some of our partners, that's a bigger deal, and I can go into what the requirements are there. Basically, we require that partners rescore 5 percent of the homes that are scored by their assessors. So we're looking at ways that we can further reduce that so it's not requiring either that intense of an amount, or being able to do some things from afar, etcetera. Remotely, I should say. Next slide.

Next slide:

I already mentioned the API. So basically again, you license it through us, and then you do -- a number of our partners are already using various software that's out there. Some of them are listed here. Others are working on it, as well. And it really makes it particularly simple for your assessors or auditors or contractors to use, because basically they're already using whatever program you're working with, with them, and so they're familiar with the tool, and now you've just integrated the Home Energy Score into that. So I think that's it on the cost savings.

Next slide:

Oh, I'm sorry, there's one more. And I think one of our partners -- I think Evan is going to touch on the sims, so I'm not going to say too much about this. But this gives you a picture of -- a couple screenshots of the 3D simulation tool, which we developed about a year ago, we launched it. And have had a number of different assessors take it and use it and learn how to score homes using that tool.

Gannate Khowailed:

Thank-you, Joan. So if you have any questions for Joan about what she just mentioned about the program, the value, and the costs, please type it in. And Joan, while we wait for questions, I have a quick question for you. So Joan, what excites you about Home Energy Score program?

Joan Glickman:

Well, mostly working with you, Gannate! But beyond that, I'm excited because, as Gannate said, I've been working on this for a long time, a lot longer than I typically work on a project, and that's because I think it is really transformational. We had to really start from the first step of having nothing in front of us, and creating a tool and getting it tested and doing tons of analysis. What excites me now is that it's really getting used by utilities and others and it's starting to make a difference in people's lives and helping to motivate change in the market. So what I care about, working here at the Department of Energy, is getting people to improve the existing housing stock. And if we can do that partially with the Score, I'm very proud of that and excited to work with our team to do that.

Gannate Khowailed:
Well-said, Joan. Thank-you. So we're still waiting for questions to come in, but I think folks are excited to hear from Evan Seretan. And Evan has been a great partner to work with. Evan is with United Illuminating. He's the senior program administrator for United Illuminating Holding Corporation's Home Energy Solutions program. Connecticut is the first statewide adoption for the program, so as Evan will talk briefly, they have had more than 200 assessors have got certified. It's had a big learning curve and a success story, and I'm excited to hear from Evan. Evan, will you please take it forward?

Evan Seretan:
Yes, thank-you, Gannate. Thanks, everyone, for joining us today. I run as Gannate mentioned what we call our Home Energy Solutions program, which is also a Home Performance with ENERGY STAR program in Connecticut. It is statewide. And on April 1, 2015 we actually implemented across the state. Anyone working within our program administers the Home Energy Score as part of the visit, and then anyone who's not working within our program, as well -- we actually partnered with BPI, so that anyone, if they wanted to run an energy score but they weren't part of our program still have access anywhere in Connecticut. So it's a partnership that we established with them, too, so we don't have any gaps in the state. So it was very exciting, as well. So if you can actually go to the next slide.

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Thank-you. We actually brand our program through what we call Energize Connecticut Initiative. It's the state's branding initiative to help consumers save money and use clean and affordable energy. It's a partnership between what we call the Connecticut Energy Efficiency Fund, which is a fund where all the ratepayer dollars go into; the Connecticut Green Bank, which is a Connecticut green financing source, and we provide no-interest loans to help make the energy efficiency measures that we recommend through our programs and offer through our programs more affordable; the state of Connecticut; and the local electric and gas utilities, which implement the program directly and which I represent today. As I mentioned, it's all funded by a charge on customers' energy bills, both their electric and gas, which is different from some other states that we've worked with in the past, as well.

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So why did we choose to use the DOE Home Energy Score for our program? We actually had a public act that was passed in 2011 in Connecticut that mandated weatherizing 80 percent of Connecticut homes by 2030. So we wanted to be able to leverage our successful direct install program, which is the Home Energy Solutions program that I run, and we wanted to limit costs. So we didn't want to necessarily put this on the customers to pay for. And we went through a long statewide input process -- multiple stakeholders, including our Connecticut Department of Energy and Environmental Protection, which oversees / regulates the energy efficiency programs in Connecticut. We also really liked that, after seeing several demonstrations, that it was relatively easy to use, and obviously the Department of Energy comes with national recognition and a name to back up the tool.

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And then we also looked at some of the home labeling policy considerations, which have really been driven by the Connecticut Department of Energy and Environmental Protection, and wanting to streamline our weatherization process with the 80 percent goal in mind. So we wanted to be able to provide Connecticut homeowners with a baseline to gauge how much they use in their home -- the energy consumption -- or if customers are going to buy a new home, how much they can expect to use. We

wanted them to be able to compare different homes when making this purchase, when they don't have other mechanisms or access to the utility bills, to be able to tell which home uses more. And it's also nice that it's an asset-based model, so you're not basing it off what someone actually uses -- it's what you would likely use or how you could compare two homes regardless of how the current users are actually using the energy in that home. And it also gives a really clear picture of how energy improvements in the home are going to affect the performance. And it's very easy for customers that aren't conversant in this industry to understand that their home's operating at a 2 or 3, and if they make certain upgrades, their home's going to be an 8 or a 9. And it really helps drive home the importance of making these upgrades and how it can help them reduce their energy use in the home. And then, finally, it was very easy -- Joan already mentioned the API -- but it's very easy to integrate the use of the technology being used by DOE with our current technology that were being used on our program. And it made it a fairly seamless transition.

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So just to give a little background on what our Home Energy Solutions program is. And Joan mentioned a little bit the direct install program. So our Home Energy Solutions program has a direct install component. But it also has a rebate and further, deeper measure component. And during the initial visit, we actually do a comprehensive assessment, as well. And we did this before the Home Energy Score, as well. So it really didn't have to add too much time to our initial visit. But we charge a small customer copay; currently that's $99 for our market-rate customers. And then we do the direct install of what we call core services, which is blower-door-guided air sealing, we do HVAC flow tests and then duct sealing, if applicable in the home. We install energy-efficient CFLs and LEDs. We provide up to six courtesy LEDs, but then we have subsidized LEDs that the customers can buy for a small copay. And then we'll also install low-flow showerheads in areas throughout the house to reduce hot water consumption. Also part of this fee now provides them with the DOE Home Energy Score report. And we do various health, comfort, and safety tests in the home.

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So we wanted to align the experience and certifications that we require for all technicians working within our program, to require the DOE Home Energy Score assessor. So our lead technicians -- we've required for quite some time that they be analysts and envelope professional certified through BPI. We also added a requirement last year that they have higher levels of industry-specific experience. So we actually require 4,000 hours of industry-specific experience. And then, beginning last year in April, we required that they'd all be DOE Home Energy Score assessors. This is to make sure that no matter what home they're going into, they can provide this assessment. And they provide, as I mentioned before, a comprehensive energy assessment of the home and the home systems. And we've added some additional collection fields, so that they can collect very minor information that's needed in addition to what we were already doing on our assessment to actually work with the DOE Home Energy Score. And from the feedback I've heard from our technicians and our vendors that work for our program in the field, is it adds approximately 15 to 20 minutes to what they were already doing in the home. So it wasn't an onerous increase in the amount of time that they're spending in the home. We've really been able to take some efficiencies from what we're already doing and combine it to make it work with the DOE Home Energy Score. And the technicians also perform various safety tests to ensure that before doing any of

the direct install measures, that the home is performing safely, as well. And it's an important aspect of our program.

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So we have what we call the Home Energy Solutions. We use HES as an acronym, too, so not to be confused with the Home Energy Score. But the Home Energy Solutions Internet Android application, this is what we were using pre-DOE Home Energy Score and what we've integrated with the DOE Home Energy Score. But it's a customized Android application that works on either an Android-enabled tablet or cell phone, and it allows for secured data ability tracking software and our mobile devices, and the DOE Home Energy Score API. And it has a unique user log-in with password protection that we've linked with the technicians' DOE home assessor IDs, and it's specific for each user that they use for each job that they work on. We require several customer signatures so that we can get access to their account data, so we can actually provide them with their actual usage and projections and reductions in usage. And we've mapped out all the software so that whatever they were collecting previously would actually map to the DOE API again, to reduce the amount of additional fields that needed to be collected. And then only collect, in addition to what we were already doing, those additional fields that were required above and beyond what we were already collecting for the program. Then at the end of the visit, our customers get both a home energy report through our Internet Android application and the DOE Home Energy Score report. And we're actually working on hopefully in the near future aligning the recommendations on those reports. So it's the same on both the home energy report and the Home Energy Score.

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So as I mentioned when I started the presentation, we became the first statewide implementer of the Home Energy Score on April 1 of last year, and we required all lead technicians to be Home Energy Score assessors in order to make this happen. We've taken synergies between the DOE Home Energy Score and our mobile application to try to reduce the additional amount of data that needs to be collected, and just add on those few fields that we needed. And it's kind of nice, too, because we actually have two ways to address customers now: Our home energy report that we provide actually models the home based on their actual usage and expectations for what they're going to see as a reduction in usage, and then we also provide them with the Home Energy Score, which provides a more asset-based model on what an average user in their home would expect to use, and how that would reduce the average user's consumption in the home, based on those fields. So it has required some education for the technicians to explain both of these to customers, but I think it's been fairly successful about relaying this to customers and how they can interpret each differently, and how it's helpful in different ways. But we've really been able to streamline our audit process and the Home Energy Score data, and we're on pace still to have over 10,000 Home Energy Scores in the first full 12 months, year.

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So this is just an idea of what it looks like on our actual Android mobile device. So you can see we have all these tiles on the left picture. We require the customer's signature down here, and we have various tiles to collect different aspects at the home. We were already doing this, but we actually added, if you look on the very bottom, this Home Energy Score tile. And we added on the top right the home detail, just a couple extra fields. And so when you go into this Home Energy Score tile, you could see -- and this is a project that's been 100 percent completed -- that it actually maps all these fields to the DOE Home Energy Score API. And these green little circles on the right picture to the left of the wording, those would

be yellow or red if information is incomplete or omitted completely or incorrect, if there's an error, to make sure that everything's right before it synchs with the DOE Home Energy Score. And if things are missing, that little 100 percent bar on the top right corner will actually reflect that and will show a lesser amount, like 80 percent, 90 percent, until we actually have all information correct to synch with the DOE API.

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So some of the challenges that we've had in the first eight months, nine months now, of administration of this, and some of the successes, as well -- like some of them go hand in hand, like the first one. But the management of nearly 200 assessors. So we've had a lot of success having all of our technicians that go into our Home Energy Solutions program, go through the DOE now-online portal, take the test and pass the test and be successful. So that's been a huge success that we've had, to have so many assessors currently in the state of Connecticut. The communication between the IT platforms with the API, it's been mostly successful, but at times there are little quirks with just two IT platforms that are different talking to each other. And so we've had to work through those, work with our programmer, and DOE has been incredibly flexible and helpful, as well, with trying to help us get through those little hurdles and to make the two systems talk to each other, and to get accurate information, most importantly. There's been several updates to the tool, and coordination between those updates and with our programmer have been challenging at times. On our platform, we can't just flip a switch. We actually have to give a new APK, which is the file that they install on their tablets to run the application. We have to send it to all the users and have them install the APK, and so when these things are rolled out, if they're rolled out during the weekday, which is typically the case, sometimes it's hard, and sometimes it misses users and we have errors out in the field. So that's something, though, again, DOE's been very responsive and flexible with. So something that, as we move forward, I think the coordination has already gotten a lot better with that. Ensuring accuracy of data. Joan was talking about rescoring 5 percent of the projects. We have been doing that through our quality assurance process. And really just making sure that not only is the data in the field that's being collecting accurate, but the data being sent over between our application and the DOE API, that that is mapping accurately, to make sure that they're getting the correct information. And we've had some issues there. One was with our domestic hot water heater measure coming over incorrectly when it had an indirect water heater on a boiler. So we were able to address that and fix that. But little things like that, that appear correctly when they're collected on our tool but actually translate over incorrectly to the API. Cost of operating the program. Different programs obviously have different budgetary constraints. For us, we are paying an additional fee to have the DOE Home Energy Score done on each project, and there's additional QA costs associated with this, to do the mentoring of new technicians and to do the rescores. But we've tried to align those as much as possible to reduce those costs and take advantage of efficiencies in the program and also to reduce any unnecessary redundancy there.

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So what are some of our future opportunities? We really want to provide consumers with a greater understanding of home performance and energy use, because we think that this is key to getting more consumers onboard with not only the Home Energy Score but also our residential retrofit energy efficiency program, Home Energy Solutions, and getting more customers taking advantage of that weatherization number for 2030, and also so more customers take advantage of the deeper measures that we offer through rebates, like insulation, windows, heating systems, hot water systems, and the like.

We want to be able to provide a greater transparency and work with any agencies in Connecticut or other groups like MLS or the real estate market, if they want to do various home certification opportunities. So integrating with any of those agencies that might want to be able to leverage what we're building with the Home Energy Score. And, as I mentioned, just greater market penetration for deeper energy efficient retrofit projects. I think that's not only our goal but DOE's goal, is to bring greater awareness, to provide greater education on energy efficiency, and to get more customers taking advantage of it because they understand the impact of energy efficiency more, through the use of this tool.

Next slide:

And if you have any questions, I think I have some time to take questions now. But that is my contact information, as well. And feel free to send me an email if you have any specific questions about what we've been doing in Connecticut. So thank-you.

Gannate Khowailed:

Perfect. Thanks, Evan. So we'll just hold all the questions until after Jerry's presentation, just to make sure we have enough time for Jerry's presentation.

Next slide:

So our next special guest is Jerry Ryan. Jerry is with New Jersey Natural Gas.

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He's an efficiency operations manager there. And New Jersey Natural Gas has really been like an early, early adopter for Home Energy Score. It's been a few years now, and there's been a long learning curve. They have provided a lot of constructive feedback. And they have done their best to meet that feedback. So with no further adieu, Jerry, would you please take it forward?

Jerry Ryan:

Yes, thank-you, Gannate, and thanks to everybody on the phone.

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I want to try to just go over how we're using the Score to try to motivate customers and capture additional energy savings. And the slide here just gives you a brief background on New Jersey Natural Gas, our service territory. And two of the important bullet points on this slide are, we have about 500,000 customers; probably about 90 percent of those customers are residential. So Home Energy Score for our programs or the efficiency programs is a really good fit. Next slide, please.

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So our energy efficiency project goes by the title the SaveGreen Project. And you can see, those are the numbers that we've accomplished since 2009, when we started this project, late in 2009. We've been able to complete over 12,500 Home Energy Scores since we implemented the Score as part of our program. And customers are required to complete an energy audit if they do a prescriptive measure as part of our program. Next slide, please.

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So customers in our program really have three different paths they can choose. We have a high-efficiency rebate associated with furnaces and boilers. Just this year, we also instituted a rebate for high-efficiency water heating. And under this program, it is required for the customer in order to receive their program, to get an audit completed by New Jersey Natural Gas. And one of the unique parts of our program is that the energy auditors who perform these audits are direct employees of New Jersey Natural Gas. They're

in-house employees through our SaveGreen Project. We also started, about three years ago now, a $6,500 on- bill repayment program at 0 percent interest for customers who replace both high-efficiency heating equipment and high-efficiency water-heating equipment. And again, under that program, it's required that a New Jersey Natural Gas auditor goes into that home. The third pathway would be Home Performance with ENERGY STAR. We provide financing, on-bill financing, through that program. And it's really the preferred pathway we would like to see customers choose, is Home Performance with ENERGY STAR. But we found through time that the majority of customers are entering through the rebate program. Next slide, please.

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So some of the strengths and challenges of our program is the immediate volume of rebate customers as compared to Home Performance customers. As I said, we would prefer to see customers do the deeper retrofits or greater energy efficiency measures, and we're able to have interaction with these customers through our audit that we complete after they replace their equipment. So this was a perfect opportunity for us to add Home Energy Score, when we sit down and talk to these customers about different measures that are available to them at the conclusion of the audit. And despite all the outreach and the program awareness that we've done, most of the time, customers are finding out about the additional programs that are available through Home Performance when they sit down with an auditor. So it was a challenge for us to motivate customers to take that second step. They're making a second investment to do additional retrofit measures after they've replaced high- efficiency equipment. And again, we saw the Home Energy Score as this opportunity to try to relate to customers very quickly what those opportunities are. Next slide, please.

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So our story with Home Energy Score began back in 2012, and we were providing recommendations at the conclusion of our audit, but the Score provides us with that very simplistic message to customers. The auditor only has about 10 or 15 minutes at the conclusion of the audit to really transfer a lot of this information that he's gained, walking throughout the house to a customer. And the Home Energy Score was perfect to show a customer that you're here now, that this is where you could be if you do some of these additional recommendations. And we do customize our recommendations. So as Joan mentioned early on, we took that opportunity to make our own custom recommendations for that last page in the Score. And we were early adopters for the program, first started in the program. We provided a lot of information back to DOE. They were very receptive with that information. And we worked together to try to make improvements to the Score. We do use an API to deliver the Score. We have an energy-savvy software that we use. And we have a Microsoft Surface tablet that the auditor uses as they go through the home, and they do the data entry on the tablet. So this enables us to deliver the Score right at the conclusion of the audit. And similar to what Evan had mentioned earlier, is we do present that Score right at the conclusion of the audit, and we email it immediately to the customer. So they can see the Score at the conclusion of the audit, but they can also digest the Score a little bit better through their email, which we can send right away at the end of the audit. We found that only added most of the data capture -- I think there were only two or three pieces of data that we had to add when we took on the Home Energy Score. Most of the data capture, we were already doing inside that customer's house. And over time, we embarked on a study with DOE to try to see whether the Home Energy Score was influencing customers to make additional home energy improvements. You know, at this time, when we were doing this study,

50 percent of the people would receive a Score at the conclusion of the audit; 50 percent of the people would not receive the Score. It was great for the purposes of the study to find out if that was really motivating customers. One of the things it did do was limit us in being able to really promote that Score during that timeframe. And we did find through the study that there was about a 14 percent lift of customers who did get a Score following through and trying to pursue those recommendations. So next slide, please.

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Our original vision was to use the Score as a motivator, and that's still the way we're using it today. I mean, we see the majority of customers coming in through this rebate path, or through the $6,500 program, and it gives us a chance to talk to customers about opportunities through Home Performance additional measures and educate them as to what opportunity they have in their house to increase their efficiency. So the way we originally saw is the way we're still using it, and that's the way I foresee using it going forward. And it's really a great tool for very quick communication. So at the conclusion of the audit, we ask customers if they're interested in having additional energy efficiency work done to sign a release. And we take that release and we share that with contractors that are working in our Home Performance program that would be interested in doing things like air sealing, duct sealing, and insulation. Next slide, please.

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So I mentioned the challenges of trying to get customers to make that second purchase. It was a difficult program to kind of get up and running. But we are beginning to see the results. And one of the things that we have learned is that it takes time. If somebody's just made a purchase on a furnace or a boiler, it might take several months for them to come back and then want to do that additional work. But what we have found is they'll hang on to that information. They'll hang on to that Energy Score; they'll hang on to those additional recommendations. And when they have the financial opportunity to do so, they'll come back and make that additional purchase. But it may take a while. And one of the things we did with that $6,500, 0 percent program is we'll allow that customer to rework that on-bill repayment. We've got additional money available, an extra $3,500 that they can take advantage of, plus a state rebate to go back and do additional insulation and air-sealing measures. So we took a look at this. We've had steady growth in the number of customers that have done this over the past two or three years. Last year in 2015, there was over a million dollars of additional job activity. And that's just incremental activity through this program. So not counting customers already have gone through Home Performance; this is an incremental addition. So it provides us also with growth under the program. And already in 2016, we've seen almost the same quantity of customers between what we've been able to close in the first quarter of our fiscal year and what we have in the pipeline. And now that we've concluded that DOE study, every customer will be able to receive the Score. We can use all the marketing materials that are available through us, through the program, through DOE, and we can reinforce for the customers and leverage the DOE brand. One thing that Evan mentioned that we found also is customers do like the fact that this is associated with, the Department of Energy. That's been a plus for us when we present that to a customer. Next slide, please.

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So for other utilities this is a score that's, as Joan mentioned, free. It was very easy to implement for us. I guess each program structure would be different. But we saw it as great value to our program and very easy to implement, with the data that we were already getting. It's a good value to your entire program

and a good conversation piece with customers. And it was easy, very easy, for customers to understand. As I said, in that very quick conversation that you have the opportunity to make an impression. This has done that for us. Next slide, please.

Next slide:
So there's my contact information. Again, I'd be happy to answer questions, or please feel free to reach out.

Gannate Khowailed:
Perfect. Thanks, Jerry. So we have one question that came in that Jerry or Evan, it would be good if one of you or both could shed some light on it. And the question is from Michelle from south Colorado, and it says, so in your audit, you are already measuring exact window sizes of all windows, or are you using estimated percentage for the windows section of the Home Energy Score process?

Jerry Ryan:
I'll take it first. if you don't mind, Evan. In our program, we have auditors that have expensive residential backgrounds. So we may not be physically measuring each window, but we will know that that window is three foot by four foot, and we will add up all those square footages to come up with a total. We are not using -- a lot of the software programs have a percentage of window area that they use, depending on which way the wall faces. We don't use that. We go around and count the windows and estimate the sizes for that data input.

Evan Seretan:
That's exactly the same way that we're doing it. And one of the reasons, and it might be the same reason that you guys are doing it this way, is because we actually offer rebates for window upgrades, as well, for eligible windows, if they're old or inefficient windows. So we need to know approximately what that square footage is so that we can offer that on the rebates that we provide to customers.

Gannate Khowailed:
OK, thank-you. So I'll let Joan wrap up before we move into answering some more questions.

Joan Glickman:
Sure. Well, first of all, thank-you, Evan and Jerry. We really appreciate not only you talking today but all the great work you guys are doing every day very much.

Gannate Khowailed:
Thank-you, Joan. So Joan, do you have like (inaudible) on other stories or other utilities that you work with, and in general, other exciting updates from the program?

Joan Glickman:
Sure. Well, I think, we're getting more and more utilities and other types of partners to join on. And one of the exciting things that's going on is that a number of states are also signing on and adopting Home Energy Score either as their primary way to demonstrate a home's level of efficiency or in combination with other sorts of ratings that are out there. Certainly HERS is being used widely for new homes and many are now, as I said, starting to use Home Energy Score for the existing homes part of the market. So I think -- are there some additional slides here, Gannate?

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So some of the highlights, I guess, that we wanted to mention were, I think we're now close to or over

34,000 homes that have been scored since the tool and the scoring system became finalized in mid-2012. We have some terrific partners across the country. I can't really mention them all, but Columbia Water and Light in Missouri is using the Score and has already scored more than 6,000 homes as part of their Home Performance with ENERGY STAR program. And they do a before and after type of approach. We're excited to have begun work with CLEAResult in Michigan; just sometime in 2015 we began working with them. And I think they have appreciated that the Score has a user-friendly report that they can now adopt, since they didn't have one specific to that program in that area of Michigan. So it's nice that it can fill that purpose, as well. PosiGen is a solar company based in Louisiana, and they've been integrating with their -- I believe it's solar leasing program -- because they want to make sure people also take advantage of the efficiency, and here at DOE, we're always saying you do efficiency first then renewables. So we like the fact that they're also promoting energy efficiency, even though solar is something that people can visually see and get excited about. And obviously we're excited about that, as well, but we want to make sure that they make their homes as efficient as possible at the same time. Focus on Energy in Wisconsin initially tried out the Score with their direct install program and were pleased with the results, and now they're integrating it into their Home Performance with ENERGY STAR program. And as I mentioned, a number of states listed here have either adopted the Score in some way or shape or they're about to do that and they're looking into it. And I don't know if we have a slide on this right now, but if we do, I can show you a new version of a label that we've designed based on feedback we've gotten from a number of states. I don't know, Maddie, if you have that one. But in any case, whether we have it or not, a number of states want to show more than just the Score metrics. So obviously we want people to show the 10- point scale, and we think that's something that communicates efficiency well, but we realize that some states want to also show estimated energy costs or nBtu, etcetera. So we've developed a one-pager that I was hoping to show but I don't think it's up here.

Next slide:

But basically, it shows a number of other metrics that you can use, and part of that here is to say that -- I know you can see it now, more or less -- that you can customize this, as well, by adding in either your state name or putting a logo at the bottom for your utility. And we've made some IT improvements to allow that kind of thing to happen through our system, and it should be in place in the next few months. So that's exciting on new news, as well. And lastly, I'll just mention that we also passed -- FHA / HUD issued a policy just this year, which we're also excited about, which allows them to lend -- I'm sorry, allows their borrowers to qualify for a higher debt-to- income ratio. So basically what it means is if you're scoring a 6 or above, you can borrow more on that house. Or if you can get the house to a 6 or above, you can also borrow more in order to make the improvements. So that's kind of a quick assessment of that. But I'm happy to provide details at another time, if people are interested.

Gannate Khowailed:

Perfect. Thanks, Joan. Yea, we have one more question, asking Evan and Jerry to shed some light on contractor and homeowner feedback so far. So Evan and Jerry, do you have some input on the contractor and homeowner experience with the Home Energy Score so far?

Evan Seretan:

Yes, I can provide this time, Jerry, if you like. I think the overwhelming feedback so far has been relatively positive. We don't have any specific statistics. We started doing some calling to get a little more feedback. And it's been largely positive. We have had a few customers who have called. One notable area that

customers have not been happy about has been that they don't get credit for their solar panels. And I know that's something that DOE is working on. I think implementing it for the Home Energy Score this year. But obviously this is a significant investment that customers have put in their home, and one of the areas that they've not been happy when they receive a Home Energy Score and their solar panels are not reflective in that Score. But overall, it's been relatively positive. And I think that just with educating them and explaining that these things are going to be added, it's relieved most tension in those few cases where customers have not been happy with the Score. But I think overall they have liked it. I think for most homes, customers have found it beneficial, and it's helped them understand their energy use better. Another area where we've had some complaints is obviously larger homes. And with users who use the Home Energy Score, obviously you are penalized based on the square footage of the home. So that is something that those customers have not been as happy about, because some of them have made significant upgrades. Some of them are also including solar panels, so some of them are the same customers, but they don't necessarily see that reflected in the Home Energy Score the way they would want to. But again, it's an educational opportunity in explaining that to them. But yea, overwhelmingly it's been positive.

Gannate Khowailed:
Thank-you, Evan. Jerry, if you don't mind, we'll just move to the next question, because we are running out of time. So the next question is, do you run into any issue with upgrades not achieving the annual savings estimated by the scoring tool -- providing a dollar amount could be a problem? And Joan, I don't know if you want to take that, or Jerry or Evan.

Joan Glickman:
I'll let them take it, but just quickly: You can provide your own estimates. You do not need to provide ours, if you choose to do that.

Gannate Khowailed:
Thank-you, Joan. Jerry and Evan?

Jerry Ryan:
I think we're not focusing so much on the specific dollar amounts as much as the upgrades that need to be done. And to echo what Evan said, I think most customers are realistic about where they are on that efficiency spectrum, once you start having that conversation. So it's really, the conversation is more steered toward what needs to be done.

Evan Seretan:
Yea, for us, we don't really have enough time doing it, so that customers would actually have a full year of utility bills to see whether it was accurate or not. So that's one of the challenges there. But we do provide it, and we have been for several years on our home energy report, which works based on their actual usage. And I think it's just a matter of educating the customer to explain that it's an estimate. But focusing on the Home Energy Score, it's specifically Btu reduction and not dollar reduction in those cases.

Joan Glickman:
That's right; I will just also say that our estimates are really based on an average homeowner. So I think that's also important to clear up, if you are using our estimates, just to say, this is based on an average homeowner with average usage conditions. If you tend to have a lot of TVs and etcetera, you might

experience a different type of improvement than others, etcetera. Actually, it's more in terms of how you set your thermostat, primarily.

Gannate Khowailed:
Perfect. Thank-you, Joan. So we did drive a little bit out of time, but it's been a very interesting discussion, and we appreciate you all taking the time. And thank-you, Jerry and Evan and Joan for joining us today. And for folks on the line, please keep the communication line open. If you have any questions, feel free to email us. Maddie, could you please show the Home Energy Score email address just one more time? Please feel free to email us. We would be happy to schedule a call with you and discuss potential ways of piloting or implementing the Home Energy Score in your local area.

Next slide:
Thank-you all for your time, and have a great afternoon. Take care.